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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/510,438
Filing Date: October 07, 2004
Appellant(s): BRUCHMANN ET AL.

Bryan H. Davidson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 03/13/08 appealing from the Office action mailed 12/14/07.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,316,538	ANDERSON ET AL.	12-2001
97/38849	KACZUN	10-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

Claims 1-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kaczun et al. (WO 97/38849) in view of Anderson et al. as previously presented in the 06/19/07 and 12/14/07 Office Actions.

Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Kaczun et al. (WO 97/38849) in view of Anderson et al., and further in view of Peiffer et al. as previously presented in the 06/19/07 and 12/14/07 Office Actions.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(10) Response to Argument

Appellant argues the combination of Kaczun in view of Anderson, alleging there is no suggestion in Anderson to include polymers into the solvent-based perfume barrier layer of Kaczun (pointing to Kaczun's linear aromatic polyesters). However, this is not a persuasive argument because Kaczun teaches in general inks printed in between polyolefin-based film layers, polypropylene and polyethylene (see Abstract, Fig. 1, page. 9, Example 1, and page 5, describing inks 14 are applied and printed between the polyolefin packaging film) and Anderson explicitly teaches the inventive hyperbranched polyester included in inks, used in film printing and packaging, for the reason of adhering well to a polyolefin films also (see col. 25, lines 30-45). It is significant to note that Kaczun does not teach that the print layer is organic solvent based contrary to Appellants arguments. Rather, Kaczun generally teaches inks which would include both solvent-based and water-based inks and thus combination with Anderson is proper. Further Appellant has provided no evidence, such as comparative test data to prove otherwise.

At col. 6, lines 45-68, Anderson teaches aqueous dispersions used as film printing inks (abstract, 9:1-41) employing a polyester using polycarboxylic acid (-COOH group) and their derivatives at 6: 42-53 and 7:1-15 (acids including dicarboxylate, dicarboxylic and adipic acids) and additionally using a myraid of alcohols (-OH group) having more than two functional groups, such as trimethylol propane found at 6:58, which has three functional groups, which

would produce hyperbranching as is consistent in meaning with Appellant's specification (page 8-page 10). The same polycarboxylic, dicarboxylic, and adipic acids and alcohols Appellant uses are a preference in his specification (found at page 9, line 45 and page 10, line 3, and page 15, Example 2 and Table 1 showing values within the claimed ranges), also denoting trimethyol propane has a functionality of three, in the synthesis reaction for the resultant hyperbranched polyester (page 8, lines 15-45-page 10, line 3). Also note at 8:45-50, Anderson teaches the resulting polymeric ABA polymer is highly branched and the polymer A contains methacrylic acid, which contains an –OH group (see further Table 3, Anderson teaching acid numbers from 83 to 148 and 8:55-57, also within Appellant's ranges of acid numbers such as those of Example 2 results in Table 1 of Appellant on page 16 of the instant specification), and the molar ratio is 3:1 A to B containing said functional groups, which overlaps the instant ratios recited (see Appellant's specification on page 10, lines 43-45, reciting 3:1). Thus because the same starting reactionary materials, the same substituents, overlapping molar ratios, and overlapping acid numbers are taught by Anderson, a hyperbranched polyester as claimed having the values recited must result therefrom or are obvious to obtain, absent any evidence to the contrary. Appellant has not provided any evidence, merely arguments, and thus the rejections are sustained.

Appellant argues Anderson et al generally teaches the reaction product of an A polymer having 3.5 or more reactive functional groups per polymer chain and a B polymer having about 2 to about 3 functional groups per polymer chain that are co-reactive with the reactive functional groups of the A polymer, to further argue that there are a large number of possible combinations of A and B according to Anderson and thus the recited values are not suggested.

The Examiner agrees with the teachings of Anderson, in that out of the large number of possible combinations, one must result in Appellant's same claimed hyperbranched polyester end product. Appellant argues the functionality of 3.5 or more is to the addition polymer (see 5:65-68), however, this is not to the polyester. The polyester is the B polymer and the B polymer includes the functional groups, listing hydroxyl and carboxyl groups (6:29) and thus are not on the A polymer as Appellant alleges (see page 9, bottom paragraph). Again, the B polymer has all of the same aforementioned starting materials as Appellant, despite Appellant's arguments that Anderson teaches a general disclosure of polymers but they are unspecific.

Appellant points to some examples alleging no OH groups are present, however, instant claim 1 also recites carboxyl groups, and this argument is not convincing because Anderson teaches examples of carboxylic acids, methacrylic acid, and alcohols with more than two functional groups, so remaining OH groups are included. Especially since at col. 7, lines 60-65

Anderson teaches the B polymer having 2 to 3 functional groups per polymer chain (and thus must leave 2 to 3 groups to react with A), which groups are the same as Appellant and the same reaction materials having enough remaining OH groups left to co-react with the reactive functional groups of A polymer as explained by Anderson. Thus the resultant polymer must inherently characteristically posses an OH number, while not explicitly stated as an "-OH number" , because the same starting materials are reacted and a similar acid number like that of Anderson (8:56-58 and Table 3) is already taught within Appellant's range. It is noted that where the examiner has reason to believe that a property asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, he or she possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on, *In re Swinehart*, 169 USPQ 226, 229 (CCPA 1971). When the claimed and prior art products are identical or substantially identical in structure or are produced by identical or a substantially identical processes, a prima facie case of either anticipation of obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The prima facie case can be rebutted by evidence showing that the prior art products do not necessarily posses the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). When the

reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § § 2112- 2112.02. A *prima facie* case has been established, and therefore the burden shifts to the Applicant to submit additional objective evidence of nonobviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art. Arguments of counsel cannot take the place of factually supported objective evidence. See, e.g., In re Huang, 100 F.3d 135,139-40, 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); *In re De Blauwe*, 736 F.2d 699,705, 222 USPQ 191, 196 (Fed. Cir. 1984). As of now, no comparative data has been presented in the record. Until the Applicant has convincingly argued or has provided evidence to the contrary, the rejections are maintained.

Appellant argues it is not clear where the inks of Kaczun are taught. Appellant is directed to page 9, last sentence on the bottom of the page, Kaczun explicitly stating (14) are inks (shown in Fig. 1 and pictured in Abstract) in between the polyolefin films (12 and 11 of high and low density polyethylenes). Kaczun was not used to teach the lacquers or barrier layers, in reference to Appellant's allegations to the contrary, but was used to teach 1) the overall structure using polymeric polyethylene films in a packing, as shown in Fig. 1

and 2) the use of a printing ink layer. The printing ink layer of Kaczun is again, a general teaching, and thus adding or substituting the ink composition using the polymers of Anderson would not negatively impact the combination, as Anderson teaches the composition is useful as an ink for packaging films, like that of Kaczun. Thus, regardless of the type of lacquer, dispersion, or solutions, this is irrelevant as the combination is proper for the reasons set forth above.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Tamra L. Dicus/

Tamra L. Dicus

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/Milton I. Cano/

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